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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,560	04/13/2001	Feng Xu	6122.500-US	3855

25907 7590 01/29/2004  
NOVOZYMES BIOTECH, INC.  
1445 DREW AVE  
DAVIS, CA 95616

EXAMINER

CORBIN, ARTHUR L

ART UNIT PAPER NUMBER

1761

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09134,560

Applicant(s)

Xu ET AL

Examiner

ARTHUR L. CORBIN

Group Art Unit

1161

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 10-16-01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1, 2, 4-8, 10-14, 16, 17, 19, 20, 22, 24, 25, 35, 39 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 2, 4-8, 10-14, 16, 17, 19, 20, 22, 24, 25, 35, 39 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☒ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

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1. The disclosure is objected to because of the following informalities: The status of the parent application, recited on page 1, line 8 of the specification, should be updated.

Appropriate correction is required.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1, 2, 4-8, 10-14, 16, 17, 19, 20, 22, 24, 25, 35 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All pending claims are indefinite in failing to recite for what the effective amount (claim 1, line 2) is effective. There is no antecedent basis in claim 1 for "the pectin enzyme" (claim 2).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 6, 8, 14, 25, 35 and 39 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yamashita (columns 2-3 and claims 1-3).

Yamashita discloses blanching raw potato pieces at 50-100<sup>0</sup> C and then washing with or immersing them in an aqueous solution of 1-3% alpha or gluco amylase followed by drying and conventional cooking.

7. Claims 4, 7, 10, 11, 16, 17, 19, 20, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita.

The particular variety of potato (claim 4) is an obvious matter of choice and is not critical. Blanching concurrently with enzyme treatment (claim 7) is not patentably distinct from blanching before enzyme treatment. Parfrying and baking (claims 10, 16, 17, 20 and 24) are conventional cooking procedures for potatoes. Freezing after parfrying potatoes (claims 11, 22 and 24) is also conventional in the art.

8. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita in view of Judkins et al, Rogols et al or Stevens et al.

It would have been obvious to starch coat the potatoes in Yamashita after blanching and drying and before cooking since it is old to starch coat blanched and dried potatoes before parfrying and freezing in order to improve crispness, as evidenced by any of the secondary references.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita in view of Fan et al.

It would have been obvious that the heating during blanching in Yamashita will activate the enzyme pectin methylesterase, which would then be present during the

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alpha or gluco amylase treatment therein, since it is well known that heating raw potatoes at 50-60<sup>0</sup> C will activate the enzyme pectin methylesterase, as evidenced by Fan et al (claim 9).

10. Claims 1, 5, 10, 14, 16, 17, 19, 25, 35 and 39 are also rejected under 35 U.S.C. 102(b) as being clearly anticipated by Roan (claim 1).

Roan discloses treating raw potato pieces with an aqueous solution of 0.1% alpha amylase enzyme and then frying.

11. Claims 4, 11, 22 and 24 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Roan.

The particular potato variety (claim 4) is an obvious matter of choice and is not critical. Freezing parfried potatoes is conventional.

12. Claims 6-8 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Roan in view of Yamashita.

It would have been obvious to blanch the potato pieces before enzyme treatment in Roan and then dry after said treatment since such steps are conventional in preparing alpha amylase treated raw potatoes, as evidenced by Yamashita.

13. Claims 12 and 13 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Roan in view of Judkins et al, Rogols et al or Stevens et al.

The secondary references are applied as in paragraph No. 8 above.

14. Claim 2 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Roan in view of Fan et al.

Fan et al is applied as in paragraph No. 9 above.

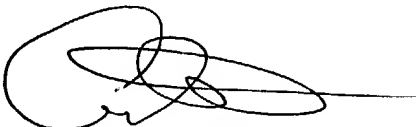
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15. Any inquiry concerning this communication from the examiner should be directed to Arthur L. Corbin whose telephone number is (571) 272-1399. The examiner can generally be reached on Tuesday--Friday from 10 a.m. to 7:30 p.m. and on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0987.

A. Corbin/dh  
January 20, 2004



ARTHUR L. CORBIN  
PRIMARY EXAMINER  
1-21-04